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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/600,379 | 06/20/2003 | Steve B. Taylor | 2236.001 | 7549 |

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| EXAMINER | |
|---|---|
| MACARTHUR, VICTOR L | |

| ART UNIT | PAPER NUMBER |
|---|---|
| 3679 | |

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) |
|---|---|---|
| | 10/600,379 | TAYLOR, STEVE B. |
| | Examiner | Art Unit |
| | Victor MacArthur | 3679 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *19 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-31* is/are pending in the application.

4a) Of the above claim(s) *23-31* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-22* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *3/19/2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

## DETAILED ACTION

### *Election/Restrictions*

Applicant's election of claims 1-22, in the paper filed on 3/19/2004 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

### *Drawings*

The drawings were received on 3/19/2007. These drawings are acceptable.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3 are rejected under 35 U.S.C. 102(b) as being anticipated by Murray U.S. Patent 5697320 (see marked-up figures below).

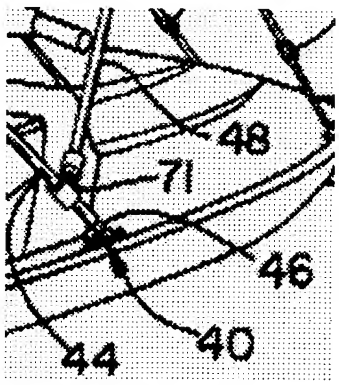


FIG. 1

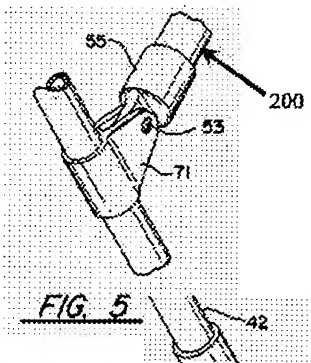


FIG. 5

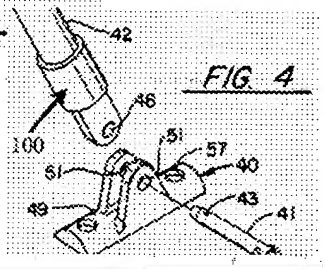


FIG. 4

Claim 1. Murray discloses (figs.1, 4, 5) a variably positionable coupler mountable on a curved surface, comprising: a base (40) formed with an upper side and a lower side, wherein the lower side is a substantially flat planar surface; means (57) for mounting the base on the curved surface; a tub (100) adjustably connectable to the base; a plug (42, 71) repositionably attachable to the tub; a neck (55) rotatably insertable in the plug, wherein the neck is formed for securing a shaft (200) to the neck; and a clevis mechanism (clevis connection between 55 and 71) slidably and demountably engageable with the plug and the neck. (Note that while the Murray curved surface does not curve at its point of contact with element 40, it does curve elsewhere and is thus a curved surface within the broadest reasonable interpretation of the claim language).

Claim 2. Murray discloses opposing yokes (tab portions of 40 receiving 41) monolithically extending at substantially right angles form the upper side of the base.

Claim 3. Murray discloses one or more bores (51) formed in the base with a proximal end and a distal end, and further wherein the one or more bores are shaped for removable engagement with a bolt (41). The word "bolt" is taken by the examiner to mean, "a metal rod or pin for fastening objects together" in accordance with Merriam-Webster's Collegiate Dictionary Tenth Edition.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Landgrebe U.S. Patent 5704749.

Claim 4. Murray does not disclose a frustoconical recess. Landgrebe teaches (fig.1 and cols.3-4) a frustoconical recess (35, 55) formed adjacent the proximal end of one or more bores (portion of B receiving A), which is beneficial for improving the alignment of a fastener within a bore during assembly (col.4, ll.1-20). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the coupler of Murray to include, frustoconical recesses, as taught by Landgrebe, for the purpose of improving fastener alignment during assembly.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Landgrebe U.S. Patent 5704749, as applied to claim 4 above, and further in view of Schroeder U.S. Patent 1257536.

Claim 5. Murray discloses that the means for mounting comprises a plurality of holes but does not specify what type of fasteners and washers are used. Schroeder teaches (figs.1 and 2) a means for mounting that is a of ball washer assembly received in a concave cup (portion of 4 receiving 8) formed adjacent a distal end of one or more bores (hole portion of 4 receiving 10). Schroeder states (p.2, ll.55-95) that ball washer means for mounting are beneficial for mounting components in a variety of positions. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the means for mounting, as taught by Schroeder, to be used at each hole of the Murray means for mounting, since Murray

does not specify the what type of fasteners and washers are used and the Schroeder ball washer assembly is beneficial for mounting components in a variety of positions.

Claims 6-13 and 16-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Schroeder U.S. Patent 1257536.

Claim 6. Murray discloses that the means for mounting comprises a plurality of holes but does not specify what type of fasteners and washers are used. Schroeder teaches (figs.1 and 2) a means for mounting that is a of ball washer assembly. Schroeder states (p.2, ll.55-95) that ball washer means for mounting are beneficial for mounting components in a variety of positions. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the means for mounting, as taught by Schroeder, to be used at each hole of the Murray means for mounting, since Murray does not specify what type of fasteners and washers are used and the Schroeder ball washer assembly is beneficial for mounting components in a variety of positions.

Claim 7. Murray as modified by Schroeder suggests that the plurality (Murray) of ball washer (Schroeder) assemblies includes a second threaded bolt (Schroeder, 10) formed with a first diameter.

Claim 8. Murray as modified by Schroeder suggests that the plurality of ball washer assemblies includes a ball washer (Schroeder, 8).

Claim 9. Schroeder teaches that the ball washer is formed with a substantially hemispherical exterior surface (top of 8), an interior surface (bottom of 8), and a duct (hole

within 8) between the substantially hemispherical exterior surface and the interior surface formed with a second diameter larger than the first diameter of the second threaded bolt.

Claim 10. Schroeder teaches a nut assembly (15).

Claim 11. Murray discloses a coupler system, comprising: a base (40) formed with opposing yokes (yoke portions of 40 receiving 41); means (57) formed in the base for mounting the base on a curved surface; a boom-swivel device (42, 71, 55) detachably fixable to the base for securing a shaft (200) to the coupler system. Murray discloses that the means for mounting comprises a plurality of holes (57) but does not specify what type of fasteners and washers are used with the holes. Schroeder teaches (figs.1 and 2) a ball washer assembly combinable with mounting means (hole 5). Schroeder states (p.2, ll.55-95) that a ball washer is beneficial for mounting components in a variety of positions. Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was made to adapt the washer assembly, as taught by Schroeder, to be combined with each hole of the Murray means for mounting, since Murray does not specify what type of fasteners and washers are used and the Schroeder ball washer assembly is beneficial for mounting components in a variety of positions.

Claim 12. Murray discloses that the opposing yokes are formed with opposing apertures (51).

Claim 13. Murray discloses that the mounting means includes a bore (57) formed in the base.

Claim 16. Murray as modified by Schroeder suggests that the plurality (Murray) of ball washer (Schroeder) assemblies includes a bolt (Schroeder, 10) formed with a first diameter.

Claim 17. Murray as modified by Schroeder suggests that the plurality of ball washer assemblies includes a ball washer (Schroeder, 8) formed with a duct (9) having a second diameter larger than the fist diameter of the bolt.

Claim 18. Murray as modified by Schroeder suggests that the plurality of ball washer assemblies includes a nut assembly (15).

Claim 19. Murray discloses that the boom-swivel device includes at least one tub (100) adjustably connectable to the opposing yokes.

Claim 20. Murray discloses that the boom-swivel device includes a plug (42, 71) repositionably attachable to the tub.

Claim 21. Murray discloses that the boom-swivel device includes a neck (55) for supporting a shaft (200) rotatably insertable in the plug.

Claim 22. Murray discloses that the boom-swivel device includes a clevis mechanism (clevis between 55 and 71) engageable with the plug and the neck.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murray U.S. Patent 5697320 (see marked-up figures above) in view of Schroeder U.S. Patent 1257536, as applied to claim 13 above, and further in view of Landgrebe U.S. Patent 5704749.

Claim 14. Murray does not disclose a recess. Landgrebe teaches (fig.1 and cols.3-4) a recess (55) formed in one end of a bore (portion of B receiving A), which is beneficial for improving the alignment of a fastener within a bore during assembly (col.4, ll.1-20). Therefore, it would have been obvious to one with ordinary skill in the art at the time the invention was

made to modify the coupler of Murray to include, a recess, as taught by Landgrebe, for the purpose of improving fastener alignment during assembly.

Claim 15. Schroeder teaches a mounting means that includes a cup (portion of 4 receiving 8) formed in the other end of a bore (5) for supporting the ball washer.

***Response to Arguments***

Applicant's arguments filed on 3/19/2004 with regard to the claim rejections have been fully considered but they are not persuasive.

The applicant argues that Murray does not disclose a means for mounting the base on a curved surface. This is not persuasive. Murray discloses that base (40) is mounted (col.3, ll.47-50) to a curved surface (surface of 20). Note that the surface (20) curves as it approaches the bow of watercraft (10). Hole elements (57) are means for accomplishing this mounting in that they can receive fasteners (i.e., screws, bolts, rivets, etc.). The fact that Murray does not explicitly state what type of fastener is used in conjunction with element 57 is irrelevant since claims 1-3 do not positively recite any specific type of fastener.

The applicant argues that Murray does not disclose a tub adjustably connectable the base since the element (100 of marked-up fig.4) is element (55) of figure 5. This is not persuasive. It appears that the applicant does not fully appreciate that figures 4 and 5 show separate sections of the assembly of figure 1. Figures 1, 4 and 5, as depicted together above, show that element 100, while similar in structure to element 55, is in addition to and assembled away from element 55. Specifically, element 100 is located between elements 40 and 71, whereas element 55 is located

above element 71. Also element (55) receives element (48, 200) whereas element 100 receives element 42.

The applicant argues that Murray does not disclose a plug. This is not persuasive. Murray discloses a plug (comprised of 42 and 71) repositionably attachable to the tub (100); a neck (55) rotatably insertable in the plug, wherein the neck is formed for securing a shaft (200) to the neck. The fact that the Murray plug is of a two-piece construction is irrelevant since the applicant does not positively claim one-piece construction.

The applicant argues that there is no motivation to combine Murray with Landgrebe. This is not persuasive. Landgrebe provides (col.4, ll.1-20) motivation to combine by stating that frustoconical recesses are beneficial for improving the alignment of a fastener within a bore during assembly (i.e., via compressive, realigning load creation and maximizing alignment force generation capability).

The applicant argues that there is no motivation to combine Murray with Schroeder. This is not persuasive. Motivation to combine comes from Schroeder (p.2, ll.55-95) which states that ball washer means for mounting are beneficial for mounting components in a variety of positions (as apposed to only one position).

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Referring to couplers:

Lee U.S. Patent 5405347

This application contains claims 23-31 drawn to an invention nonelected with traverse in the paper filed on 3/19/2004. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor MacArthur whose telephone number is (703) 305-5701. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

VLM
May 2, 2004

Daniel P. Stodola

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